

INTERNATIONAL SEARCH REPORT

Internat Application No
PCT/ 03/03173

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C10L1/02 C10L1/18 C10L1/14

Rec'd PCT/PTO 21 JAN 2005

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C10L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 509 950 A (BAKER ALAN S) 9 April 1985 (1985-04-09) column 3, line 30 - line 61; tables II,,III column 5, line 10 - line 30 column 5, line 48 - line 63; claims 1,12,14; examples 3-8 ---	23-30, 36-45
X	US 6 224 642 B1 (DALY DANIEL T ET AL) 1 May 2001 (2001-05-01) column 3, line 37 - line 6 column 5, line 44 -column 6, line 11 column 7, line 21 -column 8, line 3; claims 1,9 --- -/--	23-30, 36-45



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the International filing date but later than the priority date claimed

- *T* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the International search

17 December 2003

Date of mailing of the International search report

14/01/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 728 340 A (VOS BRON) 1 March 1988 (1988-03-01) column 1, line 45 -column 2, line 33 column 2, line 53 -column 3, line 12 column 4, line 57 -column 5, line 5; claims 1-4 ---	23-30, 36-45
X	EP 0 874 039 A (LUBRIZOL CORP) 28 October 1998 (1998-10-28) page 2, line 13 - line 16 page 3, line 1 -page 4, line 12 page 4, line 58 -page 5, line 27; claim 1 ---	23-30, 36-45
X	WO 02 02720 A (ASS OCTEL ;ARMSTRONG PETER (GB); REID JACQUELINE (GB); BREWER MARK) 10 January 2002 (2002-01-10) the whole document ---	23-30, 36-45
E	WO 03 078552 A (DALY DANIEL T ;LUBRIZOL CORP (US); CORKWELL KEITH C (US); JACKSON) 25 September 2003 (2003-09-25) page 8, line 16 -page 9, line 25 page 10, line 19 - line 22; claims 1,2,13; tables 2,4 -----	23-30, 36-45

INTERNATIONAL SEARCH REPORT

Int'l application No.
PCT/GB 03/03173

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 1-22, 31-35, 46-48
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 1-22, 31-35, 46-48

Present claims 1-22, 31-35 relate to an extremely large number of possible compositions. In fact, the claims contain so many options that a lack of clarity and conciseness within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search of the claims impossible. Consequently, the search has been carried out for those parts of the application which do appear to be clear and concise), namely claims 23-30, 36-45.

Present claims 46-48 do not meet the requirements of clarity according to Article 6 PCT because they refer to the description

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4509950	A	09-04-1985	NONE	
US 6224642	B1	01-05-2001	AU 8007300 A CA 2392357 A1 EP 1244763 A1 JP 2003514978 T WO 0138462 A1	04-06-2001 31-05-2001 02-10-2002 22-04-2003 31-05-2001
US 4728340	A	01-03-1988	AT 53860 T AU 589501 B2 AU 6973387 A BR 8701013 A CA 1309585 C DE 3762523 D1 EP 0235868 A1 JP 2112065 C JP 8032896 B JP 62218490 A NZ 219482 A PH 23520 A	15-06-1990 12-10-1989 10-09-1987 29-12-1987 03-11-1992 07-06-1990 09-09-1987 21-11-1996 29-03-1996 25-09-1987 29-05-1989 25-08-1989
EP 0874039	A	28-10-1998	EP 0874039 A1 JP 10330769 A	28-10-1998 15-12-1998
WO 0202720	A	10-01-2002	AU 6772601 A WO 0202720 A2 GB 2381789 A SE 0300005 A	14-01-2002 10-01-2002 14-05-2003 03-01-2003
WO 03078552	A	25-09-2003	WO 03078552 A2	25-09-2003